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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/862,418	05/23/2001	Eddie L. Chang	N.C. 79,764	8463

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EXAMINER

PASTERCZYK, JAMES W

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/862,418

Applicant(s)

CHANG ET AL.

Examiner

J. Pastarczyk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19-31 is/are pending in the application.
- 4a) Of the above claim(s) 21-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-17 and 19-31 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. This Office action is in response to the RCE filed 10/12/04 and refers to the final rejection mailed 6/14/04.

2. Claim 1 is objected to because of the following informalities: in the penultimate line, a comma should be added after "solution". Appropriate correction is required.

3. Claims 1-17 and 19-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the "wherein" clause is written in primarily functional language, leaving it to the practitioner to determine the actual metes and bounds of the composition as herein claimed, as well as not properly notifying the public of these metes and bounds; a composition claim should be written in language of what it is rather than what it does. Also in this clause, "chelators" is not really the proper term here (--chelated metal ions-- would be more accurate) as lacking antecedent basis.

In claim 7, "catalytically active chelated metal ion" strictly lacks antecedent basis.

In claim 9, l. 2, delete "support" as the phrase as written currently lacks antecedent basis.

In claim 12, instead of "chelate" the proper term would be --chelating ligand-- since "chelate" implies the ligand with some metal ion already bound to it. This is found in six instances in this claim as well as in claims 13, 15 (two instances), and 16. Also, the last two lines are again functional without any real chemical structure that would permit the recited function.

In claim 14, the language is functional, and it is not clear that the support alone adsorbs the materials as opposed to the support plus ligand plus metal ion.

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Further in claim 15, step (b), “covalently bound chelate groups” strictly lacks antecedent basis.

In claim 17, the language is again functional, and it is not clear if “one or more” means one or more of the individual groups, or more than one of the individual groups.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-4 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of Gustafson, Courtney, or Wagner-Jauregg in view of Gryaznov as cited in and for the reasons of record given in paragraph 5 of the previous Office action.

6. Claims 1-4, 7-11, 15, 16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courtney, Gustafson, Wagner-Jauregg and Gryaznov as applied to claims 1-4 and 7-11 above, and further in view of Singh as cited in and for the reasons of record given in paragraph 6 of the previous Office action.

7. Claims 1-11, 15-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Singh, Courtney, Wagner-Jauregg and Gryaznov as applied to claims 1-4, 7-11, 15, 16, 18 and 20 above, and further in view of Giletto as cited in and for the reasons of record given in paragraph 7 of the previous Office action.

8. Claims 1-4 and 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courtney, Gustafson, Warner-Jauregg and Gryaznov as applied to claims 1-4 and 7-11 above, and further in view of either of Hlatky or Soga as cited in and for the reasons of record given in paragraph 8 of the previous Office action.

9. Applicant's arguments filed 12/10/04 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the support being high surface area and high porosity) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In addition, applicants merely assert without documentary evidence that there is a difference between self-organized and pre-organized polymers in an attempt to overcome the Singh reference. More than mere "attorney's argument" is necessary.

Regarding the argument against Giletto, that its material is a sorbent and decontaminates chemical warfare agents appears to meet the requirements of the presently-claimed invention.

As for Hlatky and Soga, each appears to teach a way of making a polymerically-supported metal catalyst, namely first formation of the support, addition of the ligand that binds to the metal, then addition of the metal. It would have been obvious to one of ordinary skill in

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the art to use this sequence to make another catalytic material such as the presently-claimed one, as well as to change the order of steps so that the metalated ligand monomers are first formed, followed by polymerization.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is 571-272-1375. The examiner can normally be reached on M-F from 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample, can be reached at 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J. Pasterczyk

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1/3/05



DAVID SAMPLE
PRIMARY EXAMINER